

Remarks

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested.

In the pending Office Action, the Examiner rejected claim 34-38, under 35 U.S.C. §112, ¶2, as allegedly containing an indefinite term; rejected claim 34-38, under 35 U.S.C. §112, ¶1, as allegedly lacking enablement; rejected claims 34-38, under 35 U.S.C. §102(b) or §103(a), as allegedly being anticipated by or unpatentable over Uchida '051 (U.S. Pat. No. 6,057,051).

By this Amendment, claims 34-35 and 37-38 have been amended and new claim 39 has been added. No new matter has been introduced. Accordingly, claims 34-39 are currently submitted for examination, of which claim 34 is independent.

Applicant submit that by virtue of the changes to claim 8, the indefiniteness rejection has been overcome. Accordingly, the immediate withdrawal of the §112, ¶2 rejection is respectfully requested.

Applicant respectfully traverses the rejections, under 35 U.S.C. §112, §102/§103, for the following reasons:

I. Rejections Under §112.

As indicated above, independent claim 34 is directed to an electronic apparatus and positively recites, *inter alia*, a **remaining-amount measurement module** configured to measure an actual remaining amount of fuel in the tank and a **remaining-amount informing module** configured to obtain a shutdown initiating value by subtracting a predetermined value from the actual remaining amount measured by the remaining-amount measurement module, and inform the operating system of the shutdown initiating value as the remaining amount of fuel in the tank.

Applicant submits that these claim features are clear on their face and amply supported by the embodiments disclosed throughout the written description. (See, Originally-Filed Specification: page 17, line 1– page 18, line 14).

By way of illustration, the disclosed embodiments provide that, when the power supply management utility receives notice that the fuel cell unit 2 has dropped to the battery remaining power 0%, it requests the operating system to carry out the shutdown process. However, when the DMFC 22 is used as a power supply, the message to prompt the shutdown process is triggered when the battery power is 0% at the power supply controller 16. The shutdown message is then displayed and a shutdown process is carried out. However, given the lack of battery power, there is a strong possibility that the message prompt to shut down is not timely and the shut down process will not be executed properly or effectively.

To ensure proper shut down processing, the disclosed embodiments provide a configuration in which the power supply management utility informs the operating system of a value (i.e., “shutdown initiating value”) *smaller* than the actual value by adding, for example, a 2% offset to the actual one, instead of informing the operating system of the actual remaining amount of fuel in the fuel tank 2211, as shown in the status information acquired from the power supply controller 16.

Specifically, the actual remaining amount of fuel in the tank has been stored in the E2PROM 26 of the fuel cell unit 2 as the value measured by the liquid level sensor 2231. The microcomputer 21 informs the power supply controller 16 of the electronic apparatus 1 of the “shutdown initiating value,” which is obtained by *subtracting a predetermined value, e.g., 2%, from the value stored* in the E2PROM 26. The power supply controller 16 then informs the CPU 11 of an interrupt and of the “shutdown initiating value” as the remaining amount of fuel. As a result, even when the operating system recognizes 0%, there is 2% remaining amount is left in the mixing tank 223, which is sufficient to execute the shut down process properly and effectively.

Given such detailed disclosures, Applicants submit that the claim language is clear, supported, and enabled by the disclosed embodiments. Accordingly, Applicants request the immediate withdrawal of the §112, ¶1 and §112, ¶2, rejections of claims 34-39.

II. Rejections Under §102/§103.

As indicated above, independent claim 34 positively recites, *inter alia*, a **remaining-amount measurement module** configured to measure an actual remaining amount of fuel in the tank and a **remaining-amount informing module configured to obtain a shutdown initiating value by subtracting a predetermined value from the actual remaining amount measured by the remaining-amount measurement module, and inform the operating system of the shutdown initiating value as the remaining amount of fuel in the tank.**

Applicants submit that the asserted reference is incapable of suggesting each and every element of claim 34 including, for example, the features noted above. In particular, primary reference, Uchida '051, discloses numerous methods of detecting the remaining amount of fuel and then estimating the remaining operating time. The methods include a method of using a pressure sensor for detecting an amount of the hydrogen remaining in the hydrogen storage unit 5, detecting an accumulated flow rate of the hydrogen, integrating an amount of the generated electricity to find an amount of reaction of the hydrogen to thereby calculate an amount of the remaining hydrogen, and detecting an amount of the formed water by the above-mentioned method to calculate an amount of consumption of the hydrogen. Then the estimated values of an operation time elapsed and an remaining operating time are outputted through the equipment connection terminal 10 to be displayed on the equipment 1. (See, Uchida '051: col. 7, lines 39-46).

There is, however, absolutely nothing in Uchida '051 that remotely suggests **obtaining a shutdown initiating value by subtracting a predetermined value from the actual remaining amount measured by the remaining-amount measurement module, and informing the operating system of the shutdown initiating value as the remaining amount of fuel in the tank**, as required by claim 34.

Thus, for at least these reasons, the asserted reference is incapable of anticipating or rendering claim 34 unpatentable. As such, claim 34 is patentable and because claims 35-39 depend from claim 34, claims 35-39 are at least patentable by virtue of dependency as well as for their additional recitations.

Accordingly, the withdrawal of the §102(b)/§103(a) rejections of claims 34-39 is respectfully requested.

Conclusion

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

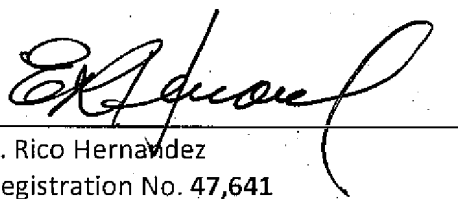
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Date: March 4, 2009

Respectfully Submitted,

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